BTEC Assignment Brief

Qualification	Pearson BTEC Level 3 National Diploma in Engineering Pearson BTEC Level 3 National Diploma in Electrical/Electronic Engineering Pearson BTEC Level 3 National Diploma in Digital Engineering Pearson BTEC Level 3 National Extended Diploma in Engineering Pearson BTEC Level 3 National Extended Diploma in Electrical/Electronic Engineering Pearson BTEC Level 3 National Extended Diploma in Computer Engineering
Unit number and title	Unit 37 Computer Networks
Learning aim(s)	Learning Aim A: Examine the types, applications, technologies, and security of computer networks
Assignment title	Ensuring networks in industry are secure
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	You have been employed as a Network Engineer at a small engineering company that has just been awarded a major lucrative government contract. You have been tasked with planning and developing a secure computer network infrastructure to meet the requirements of this contract.

Task 1	You have been asked to prepare a report analysing and evaluating the advantages and disadvantages of the current types and engineering applications of a least two engineering computer networks. You should include the enabling technologies such as: • Hardware • Software • Services • Protocols • Standards • Network security In your report you should cover the types of engineering computer networks and their characteristics, including: • Scale • Trends • Transmission formats • Network topologies • Network models • Protocols In the detail about the use of engineering computer networks for at least two industries, ensure that you cover the common threats and vulnerabilities of computer networks, suggesting protection measures.
Checklist of evidence required	A written report

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
A.P1	Explain, using examples, the types of computer networks and their applications in engineering organisations.
A.P2	Explain using examples the functions of computer network hardware and software used to provide network services.
A.P3	Explain, using examples, the common threats and vulnerabilities of an protection measures for computer networks.
A.M1	Analyse, using examples, the types, applications, technologies and the security of computer networks used by engineering organisations.
A.D1	Evaluate, using language that is technically correct and of a high standard, the types, applications, technologies and the security of computer networks used by engineering organisations.